

WHAT IS CLAIMED IS:

Claims 1-27 (Cancelled).

28. Claims 1-27 (Cancelled).

28. (Previously Presented) An electrical power transmission line, comprising:

at least one electrical cable;

a conduit of ferromagnetic material enclosing said at least one cable and comprising a base and a cover; and

electrical contact elements electrically connecting said base and said cover, wherein said electrical contact elements are selected from the group of metal fusion joints and resilient members suitable to penetrate said ferromagnetic material.

29. (Previously Presented) The electrical power transmission line of claim 28, wherein said base and said cover have superimposed portions on both sides of said conduit, and wherein said electrical contact elements are applied to said superimposed portions.

30. (Previously Presented) The electrical power transmission line of claim 28, wherein said resilient members are clips provided with portions able to penetrate said ferromagnetic material.

31. (Previously Presented) The electrical power transmission line of claim 29, wherein said superimposed portions are separated by an air gap and said superimposed portions have a width that is at least five times greater than the thickness of said air gap.

32. (Previously Presented) The electrical power transmission line of claim 31, wherein said air gap is at most 3% of the perimeter of the cross section of said conduit.
33. (Previously Presented) The electrical power transmission line of claim 28, wherein the electrical contact elements have a reciprocal longitudinal distance of at most 50 cm.
34. (Previously Presented) The electrical power transmission line of claim 33, wherein said reciprocal longitudinal distance is at most 25 cm.
35. (Previously Presented) The electrical power transmission line of claim 28, wherein the conduit comprises a plurality of longitudinal sections partially superimposed on each other and each comprising a base portion and a cover portion.
36. (Previously Presented) The electrical power transmission line of claim 35, wherein said longitudinal sections are electrically coupled to each other.
37. (Previously Presented) The electrical power transmission line of claim 35, wherein the cover portion and the base portion of each of said longitudinal sections are longitudinally shifted from each other.
38. (Previously Presented) The electrical power transmission line of claim 35, wherein said longitudinal sections are superimposed of a length that is at least 25% of the width of said conduit.
39. (Previously Presented) The electrical power transmission line of claim 28, wherein said ferromagnetic material is steel.

40. (Previously Presented) The electrical power transmission line of claim 28, wherein said at least one cable comprises three cables arranged in a trefoil configuration.

41. (Previously Presented) The electrical power transmission line of claim 35, wherein at least two of said longitudinal sections extend along different directions, wherein said conduit comprises a joining member for joining said two conduit sections, and wherein said joining member consists of two parts electrically connected by means of said electrical contact elements.

42. (Previously Presented) The electrical power transmission line of claim 35, wherein said base portion has a "U"-shaped cross-section.

43. (Previously Presented) The electrical power transmission line of claim 28, wherein said cover portion is substantially flat.

44. (Previously Presented) The electrical power transmission line of claim 28, wherein the conduit is placed underground.

45. (Previously Presented) The electrical power transmission line of claim 29, wherein a material having a magnetic permeability greater than air is positioned between said superimposed portions of said base and said cover.

46. (Previously Presented) A method for screening the magnetic field generated by an electrical power transmission line comprising at least one electrical cable, said method comprising the steps of:

placing said electrical cable in a conduit of ferromagnetic material comprising a base and a cover;

coupling said base and said cover with an electrical contact element that penetrates said ferromagnetic material; and

providing an electrical connection between said base and said cover having a conductance, per meter of length, of at least 150 Siemens/m.

47. (Previously Presented) The method of claim 46, wherein said conductance is at least 500 Siemens /m.

48. (Previously Presented) The method of claim 47, wherein said conductance is at least 1500 Siemens/m.

49. (Previously Presented) The method of claim 46, wherein said base and said cover are elastically coupled.

50. (Canceled)

51. (Previously Presented) The method of claim 46, wherein placing said electrical cable in a conduit comprises superimposing respective lateral portions of said base and said cover, and wherein providing an electrical connection between said base and said cover comprises electrically coupling said lateral portions.

52. (Previously Presented) The method of claim 51, wherein electrically coupling said lateral portions comprises applying to said lateral portions a plurality of metal resilient clips able to pierce the surface of said lateral portions under their elastic action.

53. (Previously Presented) The method of claim 46, wherein placing said electrical cable in a conduit comprises arranging the base underground, laying

down said at least one cable into said base, and leaning the cover onto said base so as to substantially close said conduit.

54. (Previously Presented) The method of claim 46, wherein the conduit comprises a plurality of longitudinal sections and the method comprises electrically coupling said longitudinal sections to each other.

55. (Previously Presented) The method of claim 46, wherein said ferromagnetic material of said conduit comprises a first ferromagnetic material for said base and a second ferromagnetic material for said cover.

56. (Previously Presented) The method of claim 46, wherein said electrical contact element interpenetrates said first ferromagnetic material of said base and said second ferromagnetic material of said cover without forming through-holes in said base or said cover.

57. (Previously Presented) The electrical power transmission line of claim 28, wherein said resilient members are suitable to penetrate said ferromagnetic material without forming through-holes in said base or said cover.

58. (Previously Presented) A method for screening the magnetic field generated by an electrical power transmission line comprising at least one electrical cable, said method comprising the steps of

placing said electrical cable in a conduit of ferromagnetic material comprising a base and a cover; and

providing an electrical connection between said base and said cover having a conductance, per meter of length, of at least 150 Siemens/m by realizing a metal fusion between said base and said cover.

59. (New) An electrical power transmission line, comprising:

at least one electrical cable;

a conduit of ferromagnetic material enclosing said at least one cable and comprising a base and a cover, said ferromagnetic material having a maximum relative magnetic permeability greater than 1,000; and

electrical contact elements electrically connecting said base and said cover, wherein said electrical contact elements are selected from the group of metal fusion joints and resilient members suitable to penetrate said ferromagnetic material.